



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,149	03/24/2004	Ming Gao Yao	12553/109	5283

7590 11/25/2009
KENYON & KENYON
Suite 600
333 N. San Carlos Street
San Jose, CA 95110-2711

EXAMINER

CASTRO, ANGEL A

ART UNIT	PAPER NUMBER
----------	--------------

2627

MAIL DATE	DELIVERY MODE
-----------	---------------

11/25/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/808,149	Applicant(s) YAO ET AL.	
	Examiner Angel A. Castro	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 5-7, 12-14 and 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-11, 15-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to Communication filed 9/3/09.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-4, 8, 10-11, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al in view of Furuichi et al (U.S. Pat. 6,731,462).

Regarding claims 1 and 15, Yamaguchi et al discloses a suspension assembly (figures 1-5), comprising a suspension 3 to hold a slider above a data storage medium; and a slider fixture 56 formed on the suspension to couple with portions of at least two surfaces of the slider other than a surface facing the data storage medium (see figures 1, 3 and 5); and an adhesive substance is applied to the portions between the slider and the slider fixture to couple the slider to the slider fixture (column 7, lines 28-30).

Regarding claim 8, Yamaguchi et al discloses a magnetic disk drive, comprising a data storage medium 101 to store data; a slider 1 which has a read/write head 2; a suspension 3 to hold the slider above the data storage medium; a slider fixture 56 formed on suspension to couple with portions of at least two surfaces of the slider other than a surface facing the data storage medium, an adhesive substance is applied to the portions between the slider and the slider fixture

Art Unit: 2627

to couple the slider to the slider fixture; and a controller to control movement of the suspension and operation of the read/write head (see figures 1, 3, 5 and column 7, lines 28-30).

Regarding claims 3-4, 10-11 and 17, Yamaguchi et al discloses that the slider fixture has a first side forming plate 56 formed to cover a first side surface of the slider and a second side forming plate 56 formed to cover a second side surface of the slider or that the slider fixture has a first side forming plate 56 formed to partially cover a first side surface of the slider and a second side forming plate 56 formed to partially cover a second side surface of the slider (see figure 5 or 26).

Yamaguchi et al shows a magnetic head 2 on a trailing surface of the slider and different than the surface coupled to the fixture, but does not specifically disclose that surface having a set of connecting pads. Furuichi et al discloses a slider 1 (figures 1-2) having a magnetic head 12 on a trailing side of the slider and having on that surface a set of connecting pads 15. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the suspension assembly of Yamaguchi et al with the trailing surface of the slider having a set of connecting pads as taught by Furuichi et al.

The rationale is as follows: one of ordinary skill in the art would have been motivated to provide the suspension assembly of Yamaguchi et al with the trailing surface of the slider having a set of connecting pads as taught by Furuichi et al as doing this would allow to connect the circuit on the suspension to the head on the slider.

3. Claims 2, 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al in view of Furuichi et al and further in view of Coon.

Art Unit: 2627

Regarding claims 2, 9 and 16, Yamaguchi et al in view of Furuichi et al discloses the suspension described above. Yamaguchi et al in view of Furuichi et al does not specifically disclose that the adhesive substance is applied as a partial dot on the portion between the slider and the slider fixture. Coon discloses a method of bonding a slider by applying a dot of adhesive (paragraph 0007). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the suspension of Yamaguchi et al in view of Furuichi et al with the adhesive dot as taught by Coon.

The rationale is as follows: one of ordinary skill in the art would have been motivated to provide the suspension of Yamaguchi et al in view of Furuichi et al with the adhesive dot as taught by Coon as doing this would avoid a bridge and failure between the fixture and the slider.

Response to Arguments

4. Applicant's arguments filed 9/3/09 have been fully considered but they are not persuasive.

Applicant asserts in page 8:

“Furuichi also fails to make up for the deficiencies of Yamaguchi. Furuichi is directed to slider and head assembly, but does not teach or suggest the relevant limitations of claim 1. For example, Figure 1 of Furuichi describes a head assembly with slider 1, actuator 2, and suspension 3. The actuator 2 is lowered slot 13 of slider 1. However, both Figure 1 and (the similar) Figure 2 of Furuichi do not teach or suggest a slider fixture formed on the suspension to couple with portions of at least two surfaces of the slider other than a surface facing the data storage medium and other than a surface having a set of connecting pads.”

The Examiner respectfully points out that Furuichi et al is used for the teaching of a surface having a set of connecting pads to a head as a head located at the same position as the

Art Unit: 2627

head of Yamaguchi, a feature that is old and well known in the art. Otherwise Yamaguchi et al shows all the claimed features in the present application.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angel A. Castro whose telephone number is 571-272-7584. The examiner can normally be reached on Monday through Thursday, 8 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Angel A. Castro/
Primary Examiner, Art Unit 2627